

**WHAT IS CLAIMED IS:**

1. A method of screening for schizophrenia in a population comprising determining the magnitude of expression, in members of the population, of at least one gene selected from the group consisting of those disclosed in Table 1 in a sample and comparing the magnitude of expression to a baseline magnitude of expression of the gene, wherein increased gene expression indicates the presence of schizophrenia.
2. A method of screening for schizophrenia in a population according to claim 1 wherein the sample is taken from brain, spinal cord, lymphatic fluid, blood, urine or feces.
3. A method of screening for schizophrenia in a population according to claim 2 wherein the sample is taken from the anterior cingulate.
4. A method of screening for schizophrenia in a population according to claim 1 wherein the population is human.
5. A method for diagnosing schizophrenia in a host comprising determining the magnitude of expression of at least one gene selected from the group consisting of those disclosed in Table 1 in a sample and comparing the magnitude of expression to a baseline magnitude of expression of the gene, wherein increased gene expression indicates the presence of schizophrenia.
6. A method for diagnosing schizophrenia in a host according to claim 5 wherein the sample is taken from brain, spinal cord, lymphatic fluid, blood, urine or feces.
7. A method for diagnosing schizophrenia in a host according to claim 6 wherein the sample is taken from the anterior cingulate.

8. A method for diagnosing schizophrenia in a host according to claim 5 wherein the host is human.

9. A method for treating schizophrenia in a host comprising lowering expression of at least one gene selected from the group consisting of those disclosed in Table 1 by administering to the host an expression lowering amount of antisense oligonucleotide.

10. A method for treating schizophrenia in a host according to claim 9 wherein the host is human.

11. A method for treating schizophrenia in a host comprising lowering expression of at least one gene selected from the group consisting of those disclosed in Table 1 by administering to the host an expression lowering amount of a ribozyme which cleaves RNA associated with expression of the gene.

12. A method for treating schizophrenia in a host according to claim 11 wherein the host is human.

13. A method for treating schizophrenia in a host comprising lowering expression of a gene selected from the group consisting of those disclosed in Table 1 by administering one or more nucleic acid molecules designed to promote triple helix formation with said gene .

14. A method for treating schizophrenia in a host according to claim 13 wherein the host is human.

15. A method for treating schizophrenia in a host comprising reducing the amount of at least one protein selected from the group consisting of those encoded by the genes disclosed in Table 1 in a patient by administering an effective amount of antibody or functional antibody fragment sufficient to interfere with the normal activity of the protein.

- 60 -

16. A method for treating schizophrenia in a host according to claim 15 wherein the host is human.

17. A method for treating schizophrenia in a host according to claim 15 wherein the antibody or functional antibody fragment is selected from the group consisting of whole antibody, humanized antibody, chimeric antibody, Fab fragment, Fab' fragment, F(ab')<sub>2</sub> fragment, single chain Fv fragment and diabody.

18. A transgenic nonhuman animal comprising stably integrated in its genome an increased copy number of a gene selected from the group consisting of the genes disclosed in Table 1 ) wherein said gene is expressed at higher than baseline levels and the animal exhibits schizophrenic behavior.

19. A transgenic nonhuman animal according to claim 18 wherein the transgenic nonhuman animal is a mammal.

20. A transgenic nonhuman animal comprising stably integrated in its genome a gene selected from the group consisting of those disclosed in Table 1 , wherein expression of the gene is enhanced by one or more alterations in regulatory sequences of the gene such that the gene is expressed at higher than baseline levels and the animal exhibits schizophrenic behavior.

21. A transgenic nonhuman animal according to claim 20 wherein the transgenic nonhuman animal is a mammal.

22. A transgenic nonhuman animal according to claim 20 wherein the one or more alterations comprises substitution of a promoter having a higher rate of expression than the native promoter of the gene.

23. A transgenic nonhuman animal according to claim 22 wherein the promoter is an inducible promoter.

24. A transgenic nonhuman knockout animal whose genome comprises a homozygous disruption in one or more genes selected from the group consisting of those disclosed in Table 1 wherein said homozygous disruption prevents the expression of the gene, and wherein said homozygous disruption results in the transgenic knockout animal exhibiting decreased expression levels of the one or more genes as compared to a wild-type animal.

25. A method of screening for a therapeutic agent that modulates symptoms of schizophrenia comprising administering a candidate compound to a transgenic nonhuman animal according to claim 18 and determining the effect of the compound on symptoms associated with schizophrenia.

26. A method of screening for a therapeutic agent that modulates symptoms of schizophrenia comprising combining a candidate compound with a transgenic nonhuman animal according to claim 20 and determining the effect of the compound on symptoms associated with schizophrenia.

27. A method of screening for a therapeutic agent that modulates symptoms of schizophrenia comprising combining a candidate compound with a transgenic nonhuman animal according to claim 24 and determining the effect of the compound on symptoms associated with schizophrenia.

28. A method of screening for a compound useful in the treatment of schizophrenia comprising operatively linking a reporter gene which expresses a detectable protein to a regulatory sequence for a gene selected from the group consisting of those disclosed in Table 1 to produce a reporter construct; transfected a cell with the reporter construct; exposing the transfected cell to a test compound; and comparing the level of expression of the reporter gene after exposure to the test compound to the level of expression before exposure to the test compound, wherein

- 62 -

a lower level of expression after exposure is indicative of a compound useful for the treatment of schizophrenia.

29. A method for treating schizophrenia in a host comprising lowering expression of a gene selected from the group consisting of those disclosed in Table 1 by administering one or more RNAi molecules designed to inhibit the expression of said gene .

30. A method for treating schizophrenia in a host according to claim 29 wherein the host is human.